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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,892	11/24/2003	Donna K. Hodges	BS030356	5145
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EXAMINER				
NELSON, FREDA ANN				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,892

Applicant(s)

HODGES ET AL.

Examiner

FREDA A. NELSON

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-23 is/are pending in the application.
- 4a) Of the above claim(s) 13, 14 and 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12, 15, and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment received on May 12, 2008 February 22, 2007 is acknowledged and entered. Claims 2-4, 12-15, and 21-23 have been amended. Claim 1 is canceled. Claims 13-14 and 16-22 have been withdrawn. No claims have been added. Claims 2-23 are currently pending.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4, 2008 has been entered.

Election/Restrictions

Claims 13-14 and 16-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 12, 2008.

Response to Amendments and Arguments

Applicant's arguments filed May 4, 2008 have been fully considered but they are not persuasive.

In response to applicant's arguments that in regards to claims 12, 15, and 23, these claims recite, or incorporate, features that are not disclosed or suggested by the proposed combination of Tiedemann, Patel, and Guilford because independent claim 12, 15, and 23 for example, recites "linearly predicting whether the user will pay on-time and in-full for the requested communications service based on a determination whether the user timely paid in-full for previous communications services" and "if a determination is made that the user will pay on-time and in-full for the requested communications service, then negotiating, at the user's client device, with other service providers of other communications networks to fulfill the request for communications service" and "if a determination is made that the user will not pay on-time and in-full for the requested communications service, then declining to fulfill the request for the communications service", the Examiner respectfully disagrees. Kowarsch discloses home networks usually have more stringent credit requirements for allowing a user to enable roaming and the home network may carry out a credit check and may ask the user to pay a deposit; and in some circumstances home networks will only allow a mobile phone to roam if additional arrangements are in place to settle charges incurred in the visited network. This may require the owner of the mobile phone to supply the home network with the authority to charge their credit card directly before they will enable the roaming facility. Thus,

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unless a user has made prior arrangements with their home network to enable the roaming facility they may not be able to roam in a visited network ([0007]; FIGS. 4 and 5). Greene discloses The most common technique used for credit scoring is linear discriminant analysis which rests on the assumption that there are two populations of individuals, which we denote as '1' and "0", each characterized by a multivariate distribution of a set of attributes, x , including such factors as age, income, family size, credit history, occupation, and so on (page 302, 2nd ¶).

In response to Applicant's argument that the Assignee does not agree that it is old and well known to provide billing preferences for communications services. The Examiner asserts that Kowarsch teaches the visited network's billing system processes the application accordingly and returns a message to the XLR 115 with the result of the application and while processing the application, the desired account validity period and the authorised amount to deposit may be verified interactively with the user by sending a USSD message to the mobile station to which the user keys in a response. Otherwise the user's profile may be matched to the operator's default choices. If the account application is successful, the user is notified of the MSVTLN, the deposit debited to the user's credit card, the service plan, the account validity period and the billing cycle. Afterwards the user is treated like a local user on a billing service plan, with the difference that charges are debited to the user's credit card at the end of each bill cycle and an itemised bill if requested is sent to the user's credit

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card billing address unless an alternative address is specified in the user preference database 70. The bill may also be sent by fax or by email ([0178]).

Examiner Note

Examiner cites particular pages, columns, paragraphs and/or line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 5-12, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. et. al (US Patent Number 5,862,471), in view of Patel et al. (US Patent Number 7,043,225), still in further view of Guilford et al. (US PG Pub. 2002/0087674); still further in view of Kowarsch (US PG Pub.

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2004/0132449); and still in further view of "Sample Selection in credit-scoring models" hereinafter referred to as "Greene."

As per claim 10-12, 15, and 23, Tiedemann, Jr. et al. disclose a method, computer program product, and system for providing communications services, comprising the steps of:

 sending a request for communications service, the request for communications service originating from a user's client device, the request for communications service communicating via a communications network to a service provider (abstract); and

 negotiating, at the user's client device, with other service providers of other communications networks to fulfill the request for communications service (abstract).

Tiedemann, Jr. does not expressly disclose linearly predicting whether the user will pay On-time and in-full for the requested communications service based on a determination whether the user timely paid in-full for previous communications services; if a determination is made that the user will. pay on-time and in-full for the requested communications service, then negotiating, at the user's client device, with other service providers of other communications networks to fulfill the request for communications service; and accessing a segmentation profile containing user preferences for presenting billing charges from the other service providers of the other communications networks; and if a determination is made that the user will not pay on-time and in-full for the requested communications service, then declining to fulfill the request for the communications service.

However Patel et al. discloses Internet gateway for brokering and negotiating wireless transmission resources between users and service providers. In particular, a web site is provided at which consumers may specify a location, time, bandwidth, type of service and/or pricing of desired services and submit request for services. In this way, consumers may easily request and negotiate with network providers, service providers and bandwidth brokers for wireless services (col. 2, line 53-col. 3, lines 7).

Guilford et al. disclose the wireless device using a table such as a routing table when in its home service area and in this aspect of the invention, the table downloaded to the wireless device includes various services within the home service provider portfolio of platforms offered and services offered by different network service providers operating within the same footprint as the home service provider (paragraphs [0022]-[0023], FIGS 7B). Guilford et al. do not expressly disclose that the segmentation profile contains preferences for presenting billing charges from another service provider of another communications network; communicating a single billing statement from a single service provider, the single billing statement aggregating billing charges between the other service providers of the other communications networks; and billing a credit card for the aggregated charges. However, it is old and well known in the business art to provide users of communications services the flexibility of selecting a billing preference, such as, credit card/debit card or billing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tiedemann, Jr. et. al. and

Guilford et al. to include the feature of billing preferences to provide the users with the convenience of selecting how they want to be billed.

Kowarsch discloses home networks usually have more stringent credit requirements for allowing a user to enable roaming and the home network may carry out a credit check and may ask the user to pay a deposit; and in some circumstances home networks will only allow a mobile phone to roam if additional arrangements are in place to settle charges incurred in the visited network. This may require the owner of the mobile phone to supply the home network with the authority to charge their credit card directly before they will enable the roaming facility. Thus, unless a user has made prior arrangements with their home network to enable the roaming facility they may not be able to roam in a visited network ([0007]).

Greene discloses The most common technique used for credit scoring is linear discriminant analysis which rests on the assumption that there are two populations of individuals, which we denote as '1' and "0", each characterized by a multivariate distribution of a set of attributes, x , including such factors as age, income, family size, credit history, occupation, and so on (page 302, 2nd ¶).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tiedemann, Jr. et al., Patel et al., Guilford et al., Kowarsch, and Greene in order to provide service providers the ability to provide communication services based on credit-worthiness to reduce risk of loss.

As per claim 5, Tiedemann, Jr. et al. discloses a method according to claim 1, further comprising the step of billing the user for the communications service (col. 2, lines 46-49) .

As per claims 6-8, Tiedemann, Jr. et al. discloses a method according to claim 1, further comprising the step of aggregating billing charges between the other service providers of the other communications networks (col. 2, lines 46-49).

As per claim 9, Tiedemann, Jr. et al. discloses a method according to claim 1, further comprising the step of providing the requested communications service (col. 2, lines 28-33).

2. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. et al (US Patent Number 5,862,471), in view of Patel et al. (US Patent Number 7,043,225), still in further view of Daniels (US Patent Number 6,058,301); still in further view of "Sample Selection in credit-scoring models" hereinafter referred to as "Greene."

As per claim 2, Tiedemann, Jr. et al. do not disclose a method according to claim 1, further comprising the step of extending trust-based credit to the user based an algorithm in which the user's historical payment information, the user's historical usage information, and the user's credit card information are variables.

However, Daniels discloses that still other subscribers may be frequent roamers with an established credit history and thus can be allowed to roam everywhere in North America, without the need for additional authentication. Less frequent roaming subscribers may be allowed to roam in specific service areas across North America (col. 5, lines 2-7).

Greene discloses The most common technique used for credit scoring is linear discriminant analysis which rests on the assumption that there are two populations of individuals, which we denote as '1' and "0", each characterized by a multivariate distribution of a set of attributes, x , including such factors as age, income, family size, credit history, occupation, and so on (page 302, 2nd ¶).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tiedemann, Jr. et. al to include the feature of Daniels and Greene in order to reduce the credit risk for the providers based on analysis of credit-worthiness of customers.

As per claims 3-4, Tiedemann et al. do not disclose a method according to claim 2, wherein the step of extending trust-based credit to the user comprises linearly predicting the user will pay for the requested communications service based upon at least one of the user's payment history, the user's usage history, and the user's credit history.

However, Daniels discloses that still other subscribers may be frequent roamers with an established credit history and thus can be allowed to roam everywhere in North America, without the need for additional authentication.

Less frequent roaming subscribers may be allowed to roam in specific service areas across North America (col. 5, lines 2-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Tiedemann, Jr. et. al to include the feature of Daniels in order to reduce the credit risk for the providers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Wednesday and Friday, 10:00 AM -6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A. N./
Examiner, Art Unit 3628

/JOHN W HAYES/
Supervisory Patent Examiner, Art Unit 3628